

ABSTRACT OF THE DISCLOSURE

A hybrid reactive power compensation device comprises a passive type reactive power compensator and an active type reactive power compensator serially connected thereto. The passive type reactive power 5 compensator is an AC power capacitor adapted to provide the reactive power that reduces capacity of the active type reactive power compensator. The active type reactive power compensator is consisted of a power converter, a DC capacitor, a high-frequency ripple filter and a controller. The hybrid reactive power compensation device can supply a linearly 10 adjustable reactive power within a predetermined range, and is adapted to provide with a serial-connected virtual harmonic damping. Therefore, it can avoid the destruction of AC power capacitor caused by the power resonance.